

Zero Accountability: The Impacts of Politicized Science

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Ву

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Chairman Gohmert and members of the Oversight and Investigation Subcommittee, I thank you for the opportunity to offer testimony on an issue of pivotal importance to our country.

Overview

Sound, rigorous science is an appropriate driver of regulatory programs across the federal agencies. The science used by the government to justify regulatory decision, however, has become increasingly weak, cherry-picked, opaque, and at odds with genuine scientific method. Members of of the National Academy of Science's review panels have shared this assessment in recent years.

As regulatory programs balloon, their scientific justification weakens. The reverse order should be true. The stakes are high. Yet, there are few available avenues to challenge the credibility of agency science. The federal courts typically give broad deference to an agency's technical expertise in matters scientific. Yet, government science is now used to justify regulatory initiatives with unprecedented impacts on this country. My testimony will highlight one example, in Texas, of how weak science under the ESA has been used to justify a federal take-over of fundamental state authority to allocate surface water for human uses.

I offer this testimony from a perspective gained through my six-year experience as the final regulatory decision-maker (Chairman) of the Texas Commission on Environmental Quality (TCEQ), the world's second largest environmental agency after the EPA. Through my previous work on environmental issues in Washington, D.C. for the National Cattlemen's Association and through four other gubernatorial-appointed Commissions in Texas, I have observed the implementation of federal environmental laws over the last thirty years.

Robust science conducted under empirical methodologies is a critical tool to inform law making and agency regulatory implementation of those laws whether that involves listing decisions and conservation plans under the Endangered Species Act or National Ambient Air Quality Standards under the Clean Air Act.

Some will claim that non-scientists, like me, cannot assess the credibility of the work of credentialed scientists. The structure of our democracy, however, requires that our popularly elected representatives or appointed heads of agencies make the final policy decisions in which all manner of science, of course, plays an essential role. My job as chairman of TCEQ required that I make judgments about science. Making final decisions for Texas on regulations, state implementation plans, environmental standards, permits, and enforcement action necessarily involved my judgments about the rigor, accuracy and relative uncertainties in diverse scientific studies, statistics, modeling protocols and technical analyses.

In recent years, I have observed a substantial deterioration of the quality of science driving regulatory or judicial decisions. Implausible assumptions somehow immune to verification, worst case scenarios, cherry-picked studies, mysteriously missing data, and absurdly precautionary methodology are now regularly used by federal agencies to justify regulatory regimes of expanding impact.

I believe that science is a critical tool to inform policy, legislation and regulation. But not all of what is called science is equally robust, transparent or objective. Scientific methodology can be easily manipulated to support a pre-determined policy or political preference.

The Whooping Crane Lawsuit

My testimony will highlight scientific issues at the core of an unusual lawsuit surrounding the federally endangered whooping crane. This species winters in and around the Aransas National Wildlife Refuge (ANWR) on the Texas gulf coast, at the bottom of the Guadalupe and San Antonio river basins. (*See, Aransas Project v. Shaw*, 775 F.3d 641, (2014)). To this end, I submit for the record a study commissioned and published by the Texas Public Policy Foundation, "Analysis of the Science: The Whooping Crane Decision" by a widely-regarded technical expert on the issue, Dr. Lee Wilson.

This litigation offers an example of the far-reaching impacts that can flow from science developed by the federal government as used by environmental activist litigators. The stakes in this litigation for the state of Texas are unprecedented. If Texas loses, the federal government through the U.S. Fish and Wildlife Service (FWS) will control allocations and diversions of all surface water in large river basins. Texas will lose its exclusive authority to manage allocations of water, uphold long vested water rights, or issue new water rights in an entire river basin originating in the Texas Hill Country flowing through San Antonio and into the bays in this fast growing region of the state.

Instead, FWS would control the state's management of surface water diversions throughout the basins under a federal Habitat Conservation Plan (HCP). The alleged water needs of the whooping cranes would become a super priority over all water rights in the Guadalupe river basin. Vested water rights for beneficial human use would become second priority, to include curtailing existing water rights held in perpetuity. These impacts could put Texas under the kind of federal water control that California is now experiencing under FWS's "science" designed to protect the Delta Smelt. Federally listed or candidate species exist in all Texas river basins. If Texas does not prevail in this litigation, the likelihood the risk of FWS control of surface water allocations throughout Texas would be high.

This lawsuit is still pending in the federal courts. Initially, the Federal District Court ruled against Texas and issued an emergency order freezing TCEQ authority to issue new water rights in the San Antonio and Guadalupe River basins until FWS developed a conservation plan that would govern consumptive water use. The Fifth Circuit Court of Appeals reversed and ruled in favor of Texas. The original environmental plaintiff now request review by the U.S. Supreme Court.

The disturbing irony in this litigation is that the assumed polarization of the water needs of an endangered species and the water needs of human beings does not match the facts of this case under the lense of more robust science. The whooping crane population and water diversions for human use in these river basins increased over the same time period. This is a fantastic "win-win" for the well-being of the whooping cranes and Texans!

The Aransas Buffalo Whooping Crane is a magnificent species worthy of the attentive care of mankind. In the 1940's perhaps only 15 cranes existed. Conservation efforts, in which the state of Texas played an important role, have helped the population to increase to around 500 birds. The species is recovering. The data demonstrates that the increasing population of whooping cranes correlates with increasing consumptive water use from 1941- 2010. (Wilson, 11). The Texas population of around 300 birds is the only wild (non-captive) flock in the world.

Aransas Project v. Shaw takes an approach unusual in the history of the ESA. The most prevalent form of litigation under the ESA is legal challenge to FWS for failure to list, failure to implement protective measures, or failure to enforce. In this suit, the environmentalist plaintiffs sued the state of Texas – not FWS – through the officials and state agency charged with allocation of surface waters, the TCEQ. Their claim is that the TCEQ is liable for killing a record number of 23 whooping cranes, or, in the ESA's legal terms, what is known as a "Take" of a listed species. The plaintiffs argue that TCEQ's fundamental authority and legal obligation under state law to uphold existing water rights caused the deaths of 23 whooping cranes in 2008-2009 – a number established by the FWS' annual local census of the crane population.

But there was a major wrinkle in this census. In the next annual survey (2009-2010), 17 additional whooping cranes "mysteriously returned." According to Dr. Wilson's analysis, these 17 cranes are the exact number that FWS found "missing" from their territory in 2008-2009 and thus presumed dead. "This number is 17: 17 birds dead in 2008-2009 only because they were missing; 17 "unexpected" birds returning in fall 2009." (Wilson, 19).

FWS wildlife biologists' annual estimates of the population of a listed species is fundamentally important to FWS' central job to prevent the risk of extinction by increasing the population and range of the species. The wildlife counts, however, typically lack rigorous methodology and are thus highly prone to error. Yet, these numbers are critical every step of the way in the ESA's legal ambit – from candidate and listing decisions, to "jeopardy" decisions under Section 7 of the Act, and to regulatory conservation plans and enforcement actions.

In the pending whooping crane litigation, the FWS's claim that 23 whooping crane deaths occurred over the 2008-2009 wintering season was accepted by the judge as the core fact of the case. The accuracy of FWS' whooping crane population survey, and thus the underlying scientific methodology endorsed by FWS to conduct these surveys, were found to be dispositive in the opinion of the District Court judge.

The FWS then abandoned the methodology for estimating the population of whooping cranes as "untenable," soon after the District Judge made her ruling. Texas requested that the evidentiary record be re-opened to include the new evidence about the return of the 17 unexpected cranes and the FWS's new methodology. The Judge declined.

The weakness of the FWS's whooping crane population survey in 2008-2009 became glaringly apparent before the District Court's ruling. First, 17 whooping cranes, thought missing and thus dead in 2008-2009, mysteriously showed up in 2009-2010! Second, a FWS report in 2012 described the assumptions of methodology that led to the 2008-2009 estimate of 23 whooping crane deaths at ANWR as "untenable" and not "defensible." (Wilson, 4); (See also, "Aransas-Wood Buffalo Whooping Crane Abundance Survey," released September 24, 2012 by the FWS).

Subsequently, the FWS completely abandoned the old methodology, on which the District Court grounded its ruling against the TCEQ. The FWS was glaringly absent from this litigation. An expert witness testified in support of the conclusions of FWS' local wildlife biologist in ANWR that 23 whooping cranes died during the 2008-2009 season. FWS apparently made no effort to intervene or to supplement the evidentiary record. And note that the report of 23 whooping cranes presumed dead did not spawn any legal action by the FWS. Given the stakes of this litigation, FWS' silence was deafening.

Because the District Court determines what are the facts at trial, a potential Supreme Court review will be without the new, more compelling facts that undermine the evidence on which the District Court ruled. The absence of these new facts could trouble a Supreme Court review.

The conflation of untested correlation and causation is an endemic scientific problem across multiple agencies. Agencies regularly use correlations (crane deaths) to establish legal causation (increasing water consumption in the river basin). Correlations can be analyzed within a causal framework, such as the commonly used Bradford Hill criteria, to determine whether an observed correlation is more or less likely to be a factual cause. Additionally, the causal credibility of a correlation should be tested against alternative explanations for correlation.

As Dr. Wilson reminds: "In science, testing of multiple hypothesis is essential to sound methodology." (Wilson, 4). Note, Dr. Wilson's analysis finds a much stronger correlation between local drought in crane habitat and crane mortality, rather than consumptive water use throughout an entire basin. What the now abandoned FWS methodology used as the measure- missing birds = presumed dead- overlooked the good news that the increasing and stronger crane population was enlarging the reach of occupied territory – a positive sign of recovery.

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Assuring integrity in government science is possible within our system of government. Agencies should be held by law to minimal criteria for credible science. Over the last 40 years, there has been an enormous growth in the environmental sciences. Some disciplines are more rigorous than others, but all could be strengthened within the terms of the appropriate enabling Acts, or through amendments to the Information Quality Act or the Data Quality Act.

Science rigorously conducted according to the empirical method in which the accuracy of a hypothesis must be tested by physical evidence is essential to sound governance in a democracy. Scientific findings are, however, categorically different than policy judgments based on reasoned weighing of societal trade-offs and relative risks. The depth and breadth of federal regulatory agencies, typically ruling under the authority of science, is now so vast that it seems a fourth branch of government has emerged, but this administrative power lacks accountability to the constitutional branches of government.